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ABSTRACT

To determine whether comprehension as measured by retelling relates to comprehension as measured by cloze and whether comprehension as measured by retelling changes as retelling is manipulated, a study involving 40 fifth grade students was undertaken. The students were ranked according to their scores on a standardized comprehension test and then randomly assigned to four groups. All groups were given 30 minutes to silently read a story of approximately 2,300 words and all were told that they would be asked to write about the story in a week. Two of the groups were told that they would be asked to tell about the story immediately after reading it; the other two groups were told that they would be asked to tell about the story one week later. After a week, all groups were administered a cloze test. The results indicated that the number of retellings did not influence scores on the cloze test, nor was there a difference in the cloze scores if the retelling was immediate or delayed. Retelling immediately after reading, however, did positively affect the scores of retelling one week later. (FL)

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Measures of Comprehension

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Background

Definitions and measures of comprehension vary widely. Despite these differences, theorists and practitioners generally agree on two points: 1) the goal of reading is comprehension; 2) one indicator, however imperfect, of comprehension is the ability to relate to someone else what one has read. This relating, or retelling as Goodman calls it (1973) may also be a means of increasing comprehension, since the act of retelling requires organizing the information from the reading into a coherent form for presenting to another. Smith, Goodman, and Meredith (1976) suggest that this presenting phase is not just helpful, but is a necessary step in the long term integration of new information with old. Telling someone about what one has read requires much more than recollection; it requires reflection and it requires an organization of what is recollected into a sequence that forms an organized whole. And, if the speaker is at all sensitive to the audience, it requires adjustment to that audience.

Retelling has been used by K. S. Goodman and his colleagues as a method of measuring comprehension for several years. Retelling is used for both research and classroom instruction. As a research tool, it is invaluable in eliciting whole, natural language focussed on what the subject deems important. As an instructional technique, it focusses the student's attention on getting meaning from text at the same time that it allows the opportunity to process that meaning through recollection and reflection.

Retelling has two parts. First, the reader is asked to tell everything s/he can remember about the story. During this first, unaided, part of the retelling, the researcher acts as an interested listener, perhaps nodding occasionally, but never interrupting. When the reader makes it clear that s/he has nothing further to add, the researcher begins the second part of the retelling, during which the researcher asks questions based on what the reader has already mentioned: these questions ask for clarification and expansion of information already volunteered. The researcher cannot say, for example, "You forgot to mention so-and-so. Who was he?" The researcher can only ask, "Can you tell me anything else about the people in the story?" Instructions for eliciting a retelling (K. S. Goodman and C. Burke, 1973) indicate that the retelling follows an oral, tape-recorded reading of a complete text. That is, the audience to whom the reader retells is the same person who has just heard the reader orally read the text. What effect this has on the retelling is unknown. Perhaps it has little; perhaps schoolchildren are so accustomed to non-communicative uses of language that telling someone a story you have just read to him is as reasonable and acceptable as, say, reciting the spelling of a list of words. It is probably more reasonable since relating a story clearly is a great deal more meaningful than reciting either letters or unrelated words. In order to increase the meaningfulness of the retelling task in this study, the students read silently rather than orally. Their retellings were thus not a repetition of the same information in another

form, but real communication. The scoring system for retelling allows for comparing individuals and it suggests, in an admittedly incomplete way, how much of the reading material was comprehended.

Cloze is another indicator of comprehension. It is much more commonly used than retelling for two reasons: cloze is faster and easier to administer and to score than retelling; cloze correlates well with standardized measures.[1] The rationale for using cloze as a measure of comprehension is that readers cannot satisfactorily fill in the blanks unless they understand the material. How much of a subject's correct score is due to the ability to manipulate the surface features of the language, and how much to real understanding of the text, is a debatable question.

A third measure of comprehension is exemplified by the California Achievement Test, which asks multiple-choice questions about each short reading passage. The CAT, like many standardized tests, is used by teachers and school administrators to group students, and is often used by researchers for the same purpose. In this study, CAT scores were used to assign subjects to group and then one measure of comprehension, retelling, was manipulated, and the results were compared to cloze scores.

Research questions.

There were several questions the study was designed to answer. The first general question was, does comprehension as measured by retelling relate to comprehension as measured

by cloze? More specifically, does the number of retellings--none, one, or two--affect the cloze score? The second general question was, does comprehension as measured by retelling change as retelling is manipulated? This second question was rephrased as two more specific questions: 1) does delaying the retelling one week significantly affect the retelling score; and 2) does retelling immediately after reading affect the score of retellings produced one week later?

Procedure.

In order to answer those questions, 48 fifth-grade students from a rural-suburban school were ranked according to their CAT scores and then randomly assigned to four groups. That is, of the four highest-ranking students, one was assigned to Group NR, one to Group DR, one to Group IR, and one to Group 2R. The next rank of four was assigned one to each group, and so on. Although the original list of subjects totaled 48, absences on one of the four data-collection days and mechanical problems with two tape-recorders reduced the number of subjects finally used in the study to 40.

All of the subjects read "My Brother is a Genius" from Book 6, Betts and Welch, Adventures Now and Then, American Book Co. 1963, p. 246-256, a selection of approximately 2300 words. Groups IR and NR read on a Monday, Groups DR and 2R on a Friday. All groups read from 10:00 a.m. to 10:30 a.m. All subjects were asked to read silently without assistance, and they were told that they would be asked to write something about the story in a week. The thirty minutes allowed for

reading the story was ample time; students who finished earlier (and all did) were given graph paper and a pencil and asked to design their name in the squares. Groups IR and 2R were told in advance of their reading that they would be asked to tell everything they could remember about the story after they finished reading. Groups DR and 2R were told in advance that they would be asked in a week to tell everything they could remember. The retellings were guided by persons trained in the administration of the Reading Miscue Inventory (Yetta Goodman and Carolyn Burke, NY: Macmillan, 1972) and were tape-recorded for later analysis. One week later, Groups DR and 2R retold the story, and all groups received the same cloze text. The cloze passage was taken from the last page of the story. Every 5th word was deleted for a total of 50 blanks. Table 1 shows treatment by group:

TABLE I

NR	IR	DR	2R	TIME
no retell	immediate retell	delayed retell	two retells	
read	read retell	read	read retell	30 min. 15 min.
		retell	retell	
cloze	cloze	cloze	cloze	15 min. ONE WEEK 15 min. LATER

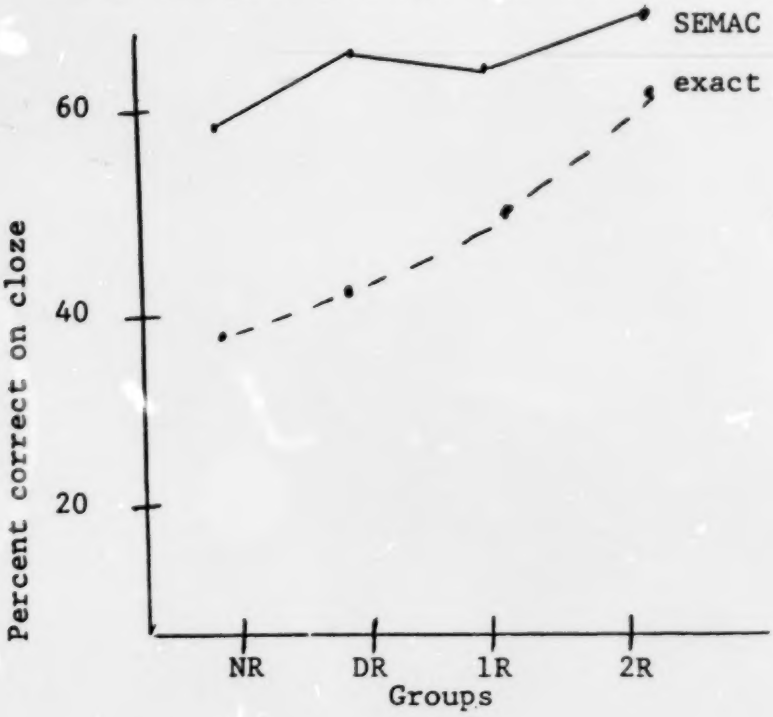
Analysis of data.

The retellings were transcribed, and the transcriptions checked by an independent listener for accuracy. The transcribed retellings were then scored according to directions in the Reading Miscue Inventory (RMI). The RMI assigns points for different categories: recall of characters, recall of plot events, statement of theme, and statement of plot. The scoring of the retellings was done independently by two researchers trained in administering and scoring the RMI; their scores were compared and differences were resolved through discussion and, sometimes, consultation with a third researcher.

The cloze passages were scored twice. First they were scored for exact replacement of the original word; second, they were scored by two researchers independently for semantic acceptability of response. Semantic acceptability was defined according to RMI guidelines, so that any word or phrase or blank left blank which resulted in a sentence that made sense with the rest of the story, was acceptable.

One of the research questions was, does the number of retellings affect the cloze scores? In order to answer this, a one-way analysis of variance was run on the cloze tests, first using the exact replacement scores, and then using the semantically acceptable scores. In both cases, the four groups were not significantly different from each other. For the exact replacement scores, $F = .366$, $(df=3,36)$, $p < .778$; for the semantically acceptable scores, $F=.668$, $(df=3,36)$, $p < .577$. Graph I indicates the means of the four groups on each cloze scoring. A slight linear trend is apparent, but it is not great enough to draw

any conclusions about the performance of the groups. Essentially, the groups did not differ on the cloze measure.



GRAPH I

The groups were then combined in four different ways, so that each N equaled 20, and one-way analyses of variance were run again. However, there were still no significant differences between groups. Table II indicates the combinations and the F statistics obtained from these analyses.

TABLE II
CLOZE SCORES

GROUP	EXACT				SEMAC			
	Mean	sd	df	F	Mean	sd	df	F
NR	38.9	15.0	3/36	.668	59.5	22.3	3/36	.366 p. < .778
DR	40.9	16.7		ns	60.9	23.4		
1R	44	13.9			60.2	19.4		
2R	48.2	17.3			68.4	23.7		
NR/DR	39.8	15.8	1/38	1.672	60.1	21.7	1/38	.735
NR/1R	41.2	14.4		ns	61.2	20.7		ns
1R/2R	46.3	15.2	1/38	.526	66.1	21.5	1/38	.291
DR/2R	44.9	17.0		ns	65.0	22.7		ns

The retellings, then, did not influence the scores on the cloze task, regardless of how the task was scored or how the groups were compared.

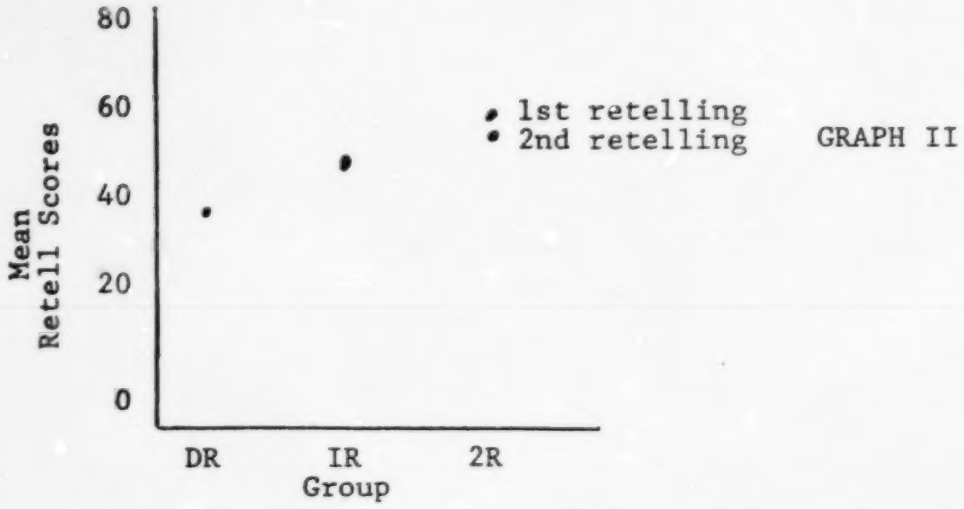
A second question was, does it make any difference in the cloze score if the retelling is immediate or delayed a week? As Graph I shows, it makes none. The group that retold immediately (IR) had a mean of 44% exact replacement; the group that retold one week later (DR) had a mean of 41%, a non-significant difference.

All the results of the cloze tests in this study, both exact replacement scores and semantically acceptable alternative scores have little or no relationship to the number and timing of the retellings. The implication for the classroom is clear: whatever retelling may do for the students' comprehension, it cannot be expected to raise their scores on cloze tests.

For most of the groups, the retelling scores were significantly correlated with the cloze scores indicating that if a subject scored highly on the retelling task, s/he was also likely to score highly on the cloze task. However, this relationship did not hold for the second retelling scores of the group that retold the story twice.

A third question asked in this study was, does retelling immediately after reading affect the scores of retelling one week later? In order to measure the effect of retelling twice on the score of the second retelling, Group 2R had its first retellings compared to those of the IR group, and its second retellings compared to those of the DR group.[2] A one-way

analysis of variance was used to compare these retelling scores. When the two groups that retold the second week were compared to each other, their scores differed significantly. $F=13.867$, $(df=1, 18)$, $p < .01$. Graph II shows the mean scores of the retellings by group.



GRAPH II

We cannot know how much of this result is attributable to retelling immediately after reading, and how much is attributable to knowing that the immediate retelling will be followed by another retelling a week later. Clearly, just informing the students that they will be asked to retell next week does not elicit the same quality of retellings as informing them of this at the same time one asks for a retelling. One cannot assume, though, that the process of retelling immediately is solely responsible for the dramatic results.

The results of this study have several implications for the classroom. The first is that teachers who want their students to recall what they have read should encourage them to talk about the reading material right after reading it, and then again several days later. This is not to say that the teacher should administer an RMI-sort of retelling to each student after each bit of reading; such a practice is of course impossible. But students should be allowed, even urged, to tell someone, possibly a classmate, about what they have just read, and they should be given the time and encouragement to repeat this process in a week or so. It is not difficult to train students to be the sort of listener an RMI-administrator is--one who listens quietly and supportively, and who asks questions of clarification only. The teacher can model the sort of listening and questioning he wants, and then the students can pair off, reciprocally retelling and listening.

The second implication of this study for the classroom is that standard measures of comprehension should be used very warily. Obviously, the CAT and tests like the CAT which ask specific questions about short passages are measuring some sort of comprehension. The cloze test too is measuring some sort of comprehension. They may be measuring the same thing. But they are not measuring those aspects of comprehension that are elicited only by retelling.

A basic difference between the CAT, cloze and retelling is that both the CAT and cloze ask specific questions about

the reading material; in retelling the opening question is wholistic: "Tell me everything you can remember." The CAT and a cloze test say to the reader, "This is important. What's the bit of information that fits this question?" Retelling says "What do you think is important? How can you communicate that to someone?" The CAT and cloze measure what the reader can produce that satisfies the requirements of the questioner; retelling measures what the reader can produce that satisfies herself. This is a difference that cannot be emphasized too strongly: unlike the other tests, retelling asks the reader to establish the criteria of importance and of completeness. And, because retelling requires the reader to recall, reflect, and reorder the information from the reading material, it may very likely require a "deeper" cognitive processing than that necessary to answer CAT-like questions or to fill in cloze blanks.

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Footnotes

[1] John R. Bormuth, "Literacy in the Classroom", in W. D. Page, ed., Help for the Reading Teacher, NCTE/ERIC, 1975, 60-90.

[2] Special thanks to W. B. Page, R. F. Carey, and J. C. Hartse, without whose help this question would not have been answered.